

CONSOLIDATED INFORMATION TECHNOLOGY SERVICES TASK ASSIGNMENT (TA)

1. **TITLE:** (B7) MANAGEMENT, PERFORMANCE STANDARDS, AND SOFTWARE ENGINEERING

TA No: SL001-Rev8

Task Area Monitor: **Alternate Task Area Monitor:**

NASA POC: None **Software Control Class:** Low Control

Type of Task: Recurring Task

2. BACKGROUND

TASK ORDER MANAGEMENT AND ADMINISTRATION

The Contractor shall manage the basic contract work in accordance with the terms of the contract and provide a primary point of contact with appropriate Government personnel on technical and administrative matters. The contractor shall provide for day to day operation and management of the contract and the management of general work assignments, staff utilization, productivity and compliance with terms of contract or task assignment orders. The following contract functions are envisioned to be supported under this TA:

3.1 Reference TO Paragraph 20, SMALL, SMALL DISADVANTAGED, AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN -- TASK ORDER REPORTING

3.2 Reference TO Paragraph 21, SECURITY PROGRAM/FOREIGN NATIONAL EMPLOYEE INVESTIGATIVE REQUIREMENTS (LaRC 52.204-91) (FEB 2000)

3.3 Reference TO Paragraph 22, SECURITY CLASSIFICATION REQUIREMENTS (1852.204-75) (SEP 1989)

3.4 Reference TO Paragraph 23, SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (1852.204-76) (JUL 2000)

3.5 Reference TO Paragraph 23, SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (1852.204-76) (JUL 2000)

3.6 Reference TO Paragraph 24, OBSERVATION OF REGULATIONS AND IDENTIFICATION OF CONTRACTOR'S EMPLOYEES (LaRC 52.211-104) (MAY 1999)

3.7 Reference TO Paragraph 25, QUALITY SYSTEM REQUIREMENTS (ISO 9001) (LaRC 52.246-95) (FEB 2000)

3.8 Reference TO Paragraph 28, SAFETY AND HEALTH SECURITY IMPLEMENTATION PLANS

3.9 Reference TO Paragraph 29, FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) CLAUSES BY REFERENCE and FULL TEXT

3.10 Preparation of monthly Financial Management Reports (533M) and Full Cost Accounting Reports as specified in Exhibit E of TO

3.11 Preparation and maintenance of Safety and Health Plan

3.12 Financial reporting of NASA Property in the Custody of Contractors

3.13 Preparation of quarterly accident/injury report

3.14 Preparation of Monthly Technical Letter Progress Reports

3.15 Preparation of Standard Form 294, Subcontracting Report for Individual Contracts

3.16 Subcontract administration associated with subcontract activity under this TO

3.17 Preparation of documentation for transferring property to the government

3.18 Preparation for and participation in monthly contract status reviews

3.19 Preparation of full cost accounting reports

3.20 Purchasing of TO specific products and services

3.21 Review and approval of all costs associated with this TO

3.22 Administration of TO modifications

3. OBJECTIVE

The overall objective of this TA is to address the management and administration functions necessary for performance of the entire ConITS Task Order, reference performance based standards and metrics, and to specify software engineering process requirements.

Task Order Management and Administration

The performance of the ConITS contract management team will involve numerous functions associated with the management and administration of the Task Order. In addition to the direct management and administration of the contract, there are requirements associated with interfacing with the Government and delivering reports that are specified in the Master contract, TO, or FAR.

Performance Standards and Metrics

The performance of the ConITS contractor will be measured semi-annually with respect to pre-defined performance standards; however, standards and metrics are not included in the Statement of Work. The reasons for this are that: 1) Performance standards and metrics for General IT Support Services are likely to evolve as experience is gained in the evaluation process; and 2) Services in the Systems and Applications Development category and Work-Area Specific category are not fully defined until a TA is issued.

Software Engineering Requirements

LaRC Management System procedures require that in the acquisition of services involving the development, maintenance, or operation of software, the Contractor shall be required to follow processes that are derived from IEEE standard software life-cycle processes. LaRC has defined three classes of software control that apply to contracted services: low, high, and critical. The control class determines the level of rigor with which the standard must be applied.

This TA (SL001) represents a basic Software Acquisition Plan (SAP) for software development, modification, and maintenance for low control level software. If the TAM agrees that the SAP for SL001 is adequate to address the software engineering requirements for their TA, then no additional SAP would be required for the requested low control level software related TA. For any software development, modification, or maintenance of either high or critical control level software a separate SAP will be required and must be provided by the TAM. The TAM should review LMS procedures LMS-CP-5593, LMS-CP-5528, and LMS-CP-5532 to determine the software engineering requirements that could apply to their TA.

There are three areas in ConITS where LMS CP-5532 applies:

1. Maintenance of existing software developed by or for LaRC. This is a requirement under Applications Management in Section 4 of the SOW. The IEEE definition of „maintenance“ is the process of modifying a software system or component after delivery to correct faults, improve performance or other attributes, or adapt to a changed environment. In general the Contractor shall follow the maintenance process defined in Clause 5.5 of IEEE/EIA Standard 12207.0-1996, Software Life Cycle Processes; however the process shall be tailored to the particular software package and applied with a rigor consistent with the software control class. In performing maintenance of a given software package, the Contractor must produce, maintain, and follow a Maintenance Plan.
2. System and Application Development Services. These are services required under Section 5 of the SOW. They involve the development of new software or the significant modification (beyond that covered under maintenance) of existing software. In general the Contractor shall comply with the life-cycle processes of IEEE/EIA Standard 12207.0-1996, Software Life Cycle Processes; however the processes shall be tailored to the specific project and applied with a rigor consistent with the software control class. In accomplishing a specific system and application development project, the Contractor must produce, maintain, and follow a Software Project Management Plan (SPMP).
3. Operations. These are services required under Section 6 of the SOW for the operation of facilities (including software) for the generation of data or reports, or to provide business, scientific, or engineering solutions. In general the Contractor shall comply with the operations process of Section 5.4 of IEEE/EIA Standard 12207.0-1996, Software Life Cycle Processes;

however, the process shall be tailored to the specific situation and applied with a rigor consistent with the software control class. In operating a specific facility, the Contractor shall produce, maintain, and follow an Operations Plan.

The task plan submitted by the Contractor in response to a TA involving the acquisition of software development, operation, or maintenance, will include an SPMP, an Operations Plan, or a Maintenance Plan; or will specify the date of delivery of these plans.

4. GENERAL IT SUPPORT SERVICES

Exceptions and Additional Requirements: Performance Standards and Metrics

Services in this area are listed in the file ConITS SOW at the ConITS web site <http://tips.larc.nasa.gov>. The services will apply to systems as specified in the inventory of equipment and software (Exhibit A) attached to a ConITS TA. A basic set of performance metrics for this area are listed under the file Performance Metrics at the ConITS web site. It is possible that the initiator of a TA will amend the services and performance standards in order to adapt them to unique requirements; for example, special shift coverage or shorter response times. In this case the TA will take precedence over the above file.

Software Engineering Processes

Within the service of Application Management, there may be a requirement in some TAs for maintenance of software that has been developed by or for LaRC. Software maintenance, as defined by the IEEE, is the modification of software after delivery to correct faults, improve performance or other attributes, or to adapt to a changed environment. A requirement for the ConITS contractor to maintain a software package developed by or for LaRC will be specified in Section 4 of a Task Assignment (TA). The software package will be identified and described briefly. The control class (low, high, or critical); the level of maintenance (whether maintenance will be to only correct errors or whether it will include enhancements); and the name of the LaRC Software Manager will also be given. The process requirements that the contractor shall follow in performing the maintenance of any such package are detailed in Attachment 1, Process Requirements for the Maintenance of Software Developed by or for LaRC.

General IT Support Services Performance Metrics

Performance Standard: Required documentation is complete, understandable, and up-to-date.

Performance Metrics:

Exceeds: Documentation is error free, complete, and up-to-date. Significant improvements have been made in the clarity of documentation.

Meets: Documentation is complete with only minor errors noted.

Fails: One or more required documentation components are not available or errors are noted that could compromise the operation or integrity of the systems.

5. SYSTEM AND APPLICATION DEVELOPMENT SERVICES

Project Title: Process Requirements for Systems and Application Development

LaRC Software Manager: NA

Software Software Control Class: Low

Responsibilities of Contractor and LaRC personnel: Services in this area are listed in the file ConITS SOW at ConITS web site <http://tips.larc.nasa.gov>. These services pertain to either development of systems and applications that involve the delivery of software, or ongoing software support to research and/or development projects. The initiator of a TA will define the requirements; i.e., the system or application that is to be developed, or provide specific requirements for software support. No performance standards or metrics have been pre-defined. The TAM will define the requirements and performance standards and metrics. A requirement for the ConITS contractor to develop or modify a system or application will be specified in Section 5 of a Task Assignment (TA). The information to be provided is specified in Attachment 2. For a major project, the task will consist of two stages. The first stage will consist of a TA that requires a Software Project Management Plan (SPMP) as the sole deliverable. Funding will cover only the effort required to produce the SPMP. The second stage will consist of an amendment to implement and fund the system or application development. For a minor project or to provide ongoing support to a research and/or development project, the TA and funding will cover the entire effort.

Requirements:

The process requirements that the contractor shall follow in performing services involving the development of software are detailed in Attachment 2, Process Requirements for Systems and Applications Development.

6. WORK-AREA SPECIFIC SERVICES

Work Area Title: NA

LaRC Manager: NA

Work Area Description: NA

Work Area Requirements: Performance Standards and Metrics

Services in this area are listed in the file ConITS SOW at the ConITS web site <http://tips.larc.nasa.gov>. No performance standards or metrics have been pre-defined. The TA initiator will define the requirements and the performance standards and metrics.

Software Engineering Processes

Work-area specific services may involve "operations." As used in the context of ConITS,

operations has a broad meaning embracing the use of systems (including software) to generate data and reports, or to provide solutions to business, scientific, or engineering problems. In some cases, operations includes the use of scripts or even high-level (application specific) languages to invoke a sequence of software products and to transfer data from one system or software package to another. A requirement for the ConITS contractor to provide operations services will be specified in Section 6 of a Task Assignment (TA). The work area will be identified, described briefly, and the name of the LaRC Manager will be given. The process requirements that the contractor shall follow in performing services involving operations are detailed in Attachment 3, Process Requirements for Operations.

7. Exhibit A

None required.

8. SPECIAL SECURITY REQUIREMENTS

None required.

9. SOFTWARE ENGINEERING PROCESS REQUIREMENTS

These requirements, as they apply to the ConITS TO, are a subject of this TA.

10. JOINT REVIEW SCHEDULE

Not applicable to this TA.

11. PERIOD OF PERFORMANCE

This TA is effective from 02/01/01 to 04/27/09

12. TECHNICAL PERFORMANCE RATING

Not required in this TA

Quality: 50% Timeliness: 50%

13. RESPONSE REQUIREMENTS

Within two weeks from receipt of this task assignment, submit to the Contracting Officer's Representative, an original and two copies of a Task Plan. This Task Plan shall: a) state that the Contractor concurs with the Task Assignment management and administration requirements given in Section 3, above; b) state that the Contractor concurs with the performance standards and metrics as established in the areas of General IT Support Services and System and Application Development Services, with the provision that they may be amended in individual TAs; and c) address the Contractor's approach to satisfying the Center's requirement for following standard software engineering processes in the development, operation, and maintenance of software for the various software control

classes. Include a signature block for concurrence by the Contract Manager and approval by the Contracting Officer's Representative.

14. FUNDING INFORMATION

Funding has not been entered for this TA.

15. MILESTONES

None required.

16. DELIVERABLES

None required.

17. FILE ATTACHMENTS

[Others](#)